**IN THE CLAIMS**

Claim 1 (currently amended): Contact element for supplying electric current to substantially board-shaped objects that are to be treated in an electrolytic process, the board-shaped objects each having an electrically conductive surface, the contact element comprising:

~~at least one contact area~~ one or more contact areas, ~~said~~ at least one ~~contact area~~ of said one or more contact areas having a shape configured in such a way that no damages occur in areas of the electrically conductive surface adjacent to said at least one of said one or more contact areas ~~contact area~~ when large currents are transmitted from said contact element to the electrically conductive surface at least in part through said at least one of said one or more contact areas ~~contact area~~ placed in contact with the electrically conductive surface, said at least one of said one or more contact areas ~~contact area~~ being ~~limited~~ bounded by a single closed boundary line, the shape of said at least one of said one or more contact areas ~~contact area~~ being designed in such a way that the ratio V of the square of the overall length L of said single closed boundary line to the size F of said at least one of said one or more contact areas ~~contact area~~ as given by the expression:

$$V = \frac{L^2}{F}$$

is at least 25.

Claim 2 (previously presented): Contact element according to claim 1, wherein the contact element is provided with at least two humps which are separated by intervals and which have one contact area each, said contact areas lying substantially in one plane and being arranged in such a manner that electrical contact can be made among all the contact areas and their corresponding contacting areas on the objects.

Claim 3 (previously presented): Contact element according to claim 2, wherein the humps have a toothed outside surface.

Claim 4 (previously presented): Contact element according to one of the claims 2 and 3, wherein the number of humps is even, the humps being arranged in rows.

Claim 5 (previously presented): Contact element according to claim 4, wherein four humps are provided and arranged in such a way that the respective contact areas are arranged at the corners of a square, a parallelogram or a trapezoid.

Claim 6 (previously presented): Contact element according to claim 2, wherein at least one of said intervals is provided which is shaped like a groove.

Claim 7 (canceled).

Claim 8 (previously presented): Contact element according to claim 16, wherein two grooves are provided which are arranged perpendicularly to one another and which

subdivide the circular surface into four equally sized contact areas having the shape of a segment of a circle.

Claim 9 (previously presented): Contact element according to claim 1, wherein said at least one contact area is star-shaped, trifoliate or dumbbell-shaped.

Claim 10 (previously presented): Contact element according to one of the previous claims 1-3, 6 and 9, wherein the contact element is preferably made from titanium, niobium, tantalum or from alloys of these metals or of other metals.

Claim 11 (previously presented): Contact element according to one of the previous claims 1-3, 6 and 9, wherein the contact areas are substantially made of copper.

Claim 12 (previously presented): Contact element according to one of the previous claims 1-3, 6 and 9, wherein the contact areas are coated with an electrically conductive, chemically resistant coating of gold, platinum, iridium, ruthenium, rhodium, alloys of these metals or mixed oxides.

Claim 13 (currently amended): Contact organ for supplying electric current to substantially board-shaped objects that are to be treated by an electrolytic process, the board-shaped objects each having an electrically conductive surface, the contact organ comprising:

at least one stem; and

at least one contact element, said at least one contact element being arranged at one end of said stem, said stem being movable with said contact element by way of a restoring force in such a way that said contact element can be pressed onto the electrically conductive surface of the board-shaped objects,

wherein said contact element has one or more contact areas, the shape of ~~the~~ said one or more contact areas being configured in such a way that no damages occur in areas of the electrically conductive surface adjacent to the contact areas when large currents are transmitted from said contact element to the electrically conductive surface through said one or more contact areas placed in contact with the electrically conductive surface, at least one of said one or more ~~each of said~~ contact areas being bounded ~~limited~~ by a single closed boundary line, the shape of said at least one of said one or more contact areas being designed in such a way that the ratio V of the square of the overall length L of said single closed boundary line of said at least one of said one or more contact areas to the size F of said at least one of said one or more contact areas as given by the expression:

$$V = \frac{L^2}{F}$$

is at least 25.

Claim 14 (previously presented): Contact organ according to claim 13, wherein said at least one contact element is provided with at least two humps which are

separated by intervals and which have one contact area each, all said contact areas lying substantially in one plane and being arranged in such a manner that electrical contact can be made among all said contact areas and the electrically conductive surface when said at least one contact element is pressed onto the electrically conductive surface.

Claim 15 (currently amended): Method for supplying electric current to substantially board-shaped objects that are to be treated by an electrolytic process, the board-shaped objects each having an electrically conductive surface, the method comprising the steps of:

providing at least one contact element, wherein the contact element has one or more contact areas, the shape of ~~the~~ said one or more contact areas being configured in such a way that no damages occur in areas of the electrically conductive surface adjacent to ~~the~~ said one or more contact areas when large currents are transmitted from the contact element to the electrically conductive surface through ~~the~~ said one or more contact areas placed in contact with the electrically conductive surface, ~~each of the~~ at least one of said one or more contact areas being bounded ~~limited~~ by a single closed boundary line, the shape of said at least one of ~~the~~ said one or more contact areas being designed in such a way that the ratio V of the square of the overall length L of ~~the~~ said single closed boundary line of ~~the~~ said at least one of ~~the~~ said one or more contact areas to the size F of ~~the~~ said at least one of ~~the~~ said one or more contact areas as given by the expression:

$$V = \frac{L^2}{F}$$

is at least 25;

pressing the at least one contact element on the electrically conductive surface; and

generating a flow of current between the contact element and the electrically conductive surface.

Claim 16 (previously presented): Contact element for supplying electric current to substantially board-shaped objects that are to be treated in an electrolytic process, the board-shaped objects each having a conductive surface, the contact element comprising:

one or more contact areas, said contact areas having a shape configured in such a way that no damages occur in areas of the conductive surface adjacent to said contact areas when large currents are transmitted from said contact element to the conductive surface through said contact areas placed in contact with the conductive surface, said contact areas being limited by boundary lines, the shape of said contact areas being designed in such a way that the ratio V of the square of the overall length L of all boundary lines to the size F of all the contact areas as given by the expression:

$$V = \frac{L^2}{F}$$

is at least 25, wherein the side faces of the contact element adjacent to the contact areas are exposed for cooling in such a way that the liquid for treatment may wash them, and

wherein several grooves are provided that subdivide a circular surface into several contact areas which have the shape of a segment of a circle, the grooves intersecting the center of the circular surface.